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       Set   Items   Description
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? E AU=KRIEG, a?

Ref    Items   Index-term
E1         5   AU=KRIEG, A. H.
E2         5   AU=KRIEG, A. M
E3         0 * AU=KRIEG, A?
E4         5   AU=KRIEG, ADAM J
E5        10   AU=KRIEG, ADAM J.
E6         2   AU=KRIEG, ADAM JEREMY
E7         1   AU=KRIEG, ADRIAN
E8         2   AU=KRIEG, ADRIAN H
E9         2   AU=KRIEG, AF
E10        3   AU=KRIEG, AH
E11        1   AU=KRIEG, AJ
E12       17   AU=KRIEG, ALEXANDER

            Enter P or PAGE for more
? S E1-E12
                 5   AU=KRIEG, A. H.
                 5   AU=KRIEG, A. M
                 0   AU=KRIEG, A?
                 5   AU=KRIEG, ADAM J
                10   AU=KRIEG, ADAM J.
                 2   AU=KRIEG, ADAM JEREMY
                 1   AU=KRIEG, ADRIAN
                 2   AU=KRIEG, ADRIAN H
                 2   AU=KRIEG, AF
                 3   AU=KRIEG, AH
                 1   AU=KRIEG, AJ
                17   AU=KRIEG, ALEXANDER
       S1        53   E1-E12
? S S1 AND AACGTT
                53   S1
               254   AACGTT
       S2        0   S1 AND AACGTT
? E AU=KLINMAN, D?

Ref    Items   Index-term
E1        76   AU=KLINMAN, D. M
E2         3   AU=KLINMAN, D. M
E3         0 * AU=KLINMAN, D?
E4         1   AU=KLINMAN, DEBRA G.
E5         1   AU=KLINMAN, DENIS
E6        29   AU=KLINMAN, DENNIS
E7        60   AU=KLINMAN, DENNIS M
E8       200   AU=KLINMAN, DENNIS M.
E9         1   AU=KLINMAN, DENNIS M^
E10        1   AU=KLINMAN, DENNIS MARC
E11        1   AU=KLINMAN, DENNIS R.
E12      119   AU=KLINMAN, DM

            Enter P or PAGE for more
? S E1-E12
                76   AU=KLINMAN, D. M
                 3   AU=KLINMAN, D. M
                 0   AU=KLINMAN, D?
                 1   AU=KLINMAN, DEBRA G.
                 1   AU=KLINMAN, DENIS
                29   AU=KLINMAN, DENNIS
                60   AU=KLINMAN, DENNIS M
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              200  AU=KLINMAN, DENNIS M
                1  AU=KLINMAN, DENNIS MF
                1  AU=KLINMAN, DENNIS MARC
                1  AU=KLINMAN, DENNIS R
              119  AU=KLINMAN, DM
       S3     491  E1-E12
? S S3 AND (AACGTT)
              491  S3
              254  AACGTT
       S4       0  S3 AND (AACGTT)
? S S3 AND CG
              491  S3
            80853  CG
       S5       0  S3 AND CG
? S S3 AND CpG
              491  S3
           138112  CPG
       S6     227  S3 AND CPG
? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
       S7     127  RD (unique items)
? t s7/3,k/1-4
>>>KWIC option is not available in file(s): 399

 7/3,K/1      (Item 1 from file: 6)
DIALOG(R)File   6:NTIS
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2278440  NTIS Accession Number: ADA417843/XAB
   Rapid Induction of Protective Immunity Against Biothreat Agents Using
CPG-Based Oligonucleotides
  (Final addendum rept. 1 Aug 2001-1 Aug 2003)
  Klinman, D. M
  Department of Health and Human Services, Washington, DC.
  Corp. Source Codes: 068119000; 439199
  Sep 2003   56p
  Languages: English
  Journal Announcement: USGRDR0405
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fax at (703)605-6900; and email at orders@ntis.gov. NTIS is located at 5285
Port Royal Road, Springfield, VA, 22161, USA.
  NTIS Prices: PC A05/MF A01

   Rapid Induction of Protective Immunity Against Biothreat Agents Using
CPG-Based Oligonucleotides
  Klinman, D. M
  This research project examines the ability of synthetic oligonucleotides
(ODN) containing immunostimulatory 'CpG motifs' to trigger the innate
immune system, thereby improving the host's ability to survive infection by
biowarfare agents. Additional studies examining the ability of these
CpG ODN to act as adjuvants when co-administered with vaccines being
developed to prevent infection by biowarfare pathogens are also being
pursued. Our initial results showed that CpG ODN protected mice
against a variety of bacterial and viral pathogens, including Anthrax,
Ebola, Listeria, and Tularemia. When used as vaccine adjuvants, these
CpG ODN significantly boost antigen-specific IgG and type 1 cytokine
production in both muring and...
```

... CpC CDN could protect against pathogen challenge in non-human primates and (3)that these CpG CDN could promote the induction of antigen-specific immune responses in non- human primates. Results indicate that CpG CDN need to contain multiple different CpG motifs to stimulate PBMC form diverse human donors. These CDN were found to protect rhesus...

... co-administered vaccines (including AVA, rPA, and HKLV) in macaques. Serum transfer studies indicate that CpG CDN increase the magnitude and rapidity of the protective immune response elicited by vaccines against ...
identifiers: Cdn(Oligonucleotides); Cpg oligonucleotide; Immunoprotection; NTISDODXA

7/3,K/2 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS
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2218973 NTIS Accession Number: ADA394767/XAB
Rapid Induction of Protective Immunity Against Biothreat Agents Using CPG-Based Oglionucleotides
(Final rept. 1 Aug 1998-1 Aug 2001)
Klinman, D. M.
Department of Health and Human Services, Washington, DC.
Corp. Source Codes: 068119000; 439199
Sep 2001 125p
Languages: English
Journal Announcement: USGRDR0202
Product reproduced from digital image. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)605-6900; and email at orders@ntis.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A07/MF A02

Rapid Induction of Protective Immunity Against Biothreat Agents Using CPG-Based Oglionucleotides
Klinman, D. M.
This research project examines the ability of synthetic oligonucleotides (CDN) containing immunostimulatory 'CpG motifs' to trigger the innate immune system, thereby improving the host's ability to survive infection by biowarfare agents. Additional studies examining the ability of these CpG CDN to act as adjuvants when co-administered with vaccines being developed to prevent infection by biowarfare pathogens are also being pursued. Our results indicate that CpG CDN provide protection in mice against a variety of bacterial and viral pathogens, including Antbrax, Ebola, Listeria, and Tularemia. A single injection of CpG CDN provides protection for up to two weeks. The duration of protection can be extended by repeated CDN injections, or by administering the CpG CDN encapsulated in cationic stealth liposomes. When used as vaccine adjuvants, these CpG CDN significantly boost antigen-specific IgG and type 1 cytokine production in both murine and non-human primate models. Two types of CpG CDN were identified that stimulated cells of the human immune system. K' type CDN induced...

7/3,K/3 (Item 3 from file: 6)
DIALOG(R)File 6:NTIS
(c) 2009 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

2200937 NTIS Accession Number: ADA390846/XAB
Rapid Induction of Protective Immunity Against Biothreat Agens Using

CPG-Based Oglionucleotides
(Annual rept. 1 Aug 1998-1 Aug 1999)
Klinman, D. M.
Department of Health and Human Services, Washington, DC.
Corp. Source Codes: 068119000; 396040
Sep 1999 41p
Languages: English
Journal Announcement: USGRDR0120
Product reproduced from digital image. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)605-6900; and email at orders@ntis.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A04/MF A01

Rapid Induction of Protective Immunity Against Biothreat Agens Using CPG-Based Oglionucleotides
Klinman, D. M.
This research project examines the ability of synthetic oligonucleotides (ODN) containing immunostimulatory 'CpG' motifs to trigger the innate immune system, thereby improving the host's ability to survive infection by biowarfare agents. Our studies indicate that synthetic ODN expressing CpG motifs protect mice from a variety of bacterial and viral pathogens, including Ebola, L. monocytogenes...

... period immediately following infection. Protection persisted for approximately 2 weeks after a single dose of CpG ODN. The duration of protection could be prolonged by repeatedly re-administering the ODN every 2 weeks. We then examined whether CpG ODN would be active on human immune cells. We identified one category of CpG motif that stimulated cell proliferation and the production of IgM, and a second category of CpG motif that stimulated the secretion of IFNg in vitro. These findings are being actively pursue towards the goal of identifying CpG ODN that will be effective in preventing.

7/3,K/4 (Item 1 from file: 24)
DIALOG(R)File 24:CSA Life Sciences Abstracts
(c) 2009 CSA. All rts. reserv.

0003910742 IP ACCESSION NO: 11068372
Inductive and suppressive networks regulate TLR9-dependent gene expression in vivo

Klaschik, S; Tross, D; Klinman, DM
Laboratory of Experimental Immunology, Cancer and Inflammation Program, National Cancer Institute, National Institutes of Health, Building 567, Room 205, Frederick, MD 21702, USA, [mailto:klinmand@mail.nih.gov]

Journal of Leukocyte Biology, v 85, n 5, p 788-795, May 2009
PUBLICATION DATE: 2009

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 0741-5400
FILE SEGMENT: Bacteriology Abstracts (Microbiology B); Genetics Abstracts; Industrial & Applied Microbiology Abstracts (Microbiology A); Immunology Abstracts
Klaschik, S; Tross, D; Klinman, DM

ABSTRACT:

Bacterial DNA expressing unmethylated CpG motifs binds to TLR9, thereby stimulating a broadly protective, innate immune response. Although CpG-mediated signal transduction has been studied, the scope of TLR9-dependent gene expression is incompletely understood. To resolve these issues, mice were treated with immunostimulatory CpG oligonucleotides (CDN) and splenic mRNA levels monitored from 30 min through 3 days by microarray...

...networks responsible for TLR9-mediated gene expression. Current results are the first to establish that CpG-induced stimulation of the innate immune system proceeds in multiple waves over time, and gene...

...mice supports the conclusion that the regulatory networks identified by our bioinformatic analysis accurately identified CpG CDN-driven gene-gene interactions in vivo. Equally important, this work identifies the counter-regulatory mechanisms embedded within the signaling cascade that suppresses the proinflammatory response triggered in vivo by CpG DNA stimulation. Identifying these network interactions provides novel and global insights into the regulation of...

DESCRIPTORS: Bioinformatics; CpG islands; Data processing; Gene expression; Gene regulation; Immune response; Immunostimulation; Inflammation; Leukocytes; Oligonucleotides; Signal transduction...

```
? e au=steinberg, al?

Ref    Items   Index-term
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E3         0  *AU=STEINBERG, AL?
E4         8   AU=STEINBERG, ALAN
E5         1   AU=STEINBERG, ALAN B.
E6         3   AU=STEINBERG, ALAN BRUCE
E7         1   AU=STEINBERG, ALAN GILBERT ROBERT
E8         1   AU=STEINBERG, ALAN J
E9         1   AU=STEINBERG, ALAN L.
E10        2   AU=STEINBERG, ALAN M
E11       10   AU=STEINBERG, ALAN M.
E12        1   AU=STEINBERG, ALAN MARTIN

           Enter P or PAGE for more
? s e1-e12
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               8   AU=STEINBERG, ALAN
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               3   AU=STEINBERG, ALAN BRUCE
               1   AU=STEINBERG, ALAN GILBERT ROBERT
               1   AU=STEINBERG, ALAN J
               1   AU=STEINBERG, ALAN L.
               2   AU=STEINBERG, ALAN M
              10   AU=STEINBERG, ALAN M.
               1   AU=STEINBERG, ALAN MARTIN
      S8      43   E1-E12
? s s8 and aacgtt
              43   S8
             254   AACGTT
      S9       0   S8 AND AACGTT
? s aacgtt and olig?
             254   AACGTT
         2406792   OLIG?
     S10     174   AACGTT AND OLIG?
? rd
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>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.
      S11          38  RD  (unique items)
? t s11/3,k/1-11
>>>KWIC option is not available in file(s): 399

 11/3,K/1      (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2009 The Thomson Corporation. All rts. reserv.

0020364532   BIOSIS NO.: 200800411471
The expression profile of TLR9 mRNA and CpG ODNs immunostimulatory actions
  in the teleost gilthead seabream points to a major role of lymphocytes
AUTHOR: Cuesta A (Reprint); Esteban MA; Meseguer J
AUTHOR ADDRESS: Univ Murcia, Fac Biol, Dept Cell Biol and Histol, Fish
  Innate Immune Syst Grp, E-30100 Murcia, Spain**Spain
AUTHOR E-MAIL ADDRESS: cuesta.alberto@inia.es
JOURNAL: Cellular and Molecular Life Sciences  65 (13): p2091-2104 JUL 2008
 2008
ITEM IDENTIFIER: doi:10.1007/s00018-008-8146-7
ISSN: 1420-682X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The potential effects of synthetic unmethylated
  oligodeoxynucleotides (ODN) containing CpG motifs, mimicking
  bacterial DNA, has never been evaluated on the immune response...

...cell-source. To conclude, ODNs containing GACGTT, GTCGTT (optimal for
  mouse and human, respectively) or AACGTT motifs are the most potent
  inducers of seabream immunity, whilst the involvement of TLR9 is...

DESCRIPTORS:
  CHEMICALS & BIOCHEMICALS:    ...oligodeoxynucleotide--


 11/3,K/2      (Item 2 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2009 The Thomson Corporation. All rts. reserv.

17222739   BIOSIS NO.: 200300181458
CpG oligodeoxynucleotides activate grass carp (Ctenopharyngodon
  idellus) macrophages.
AUTHOR: Meng Zhen; Shao Jianzhong (Reprint); Xiang Lixin
AUTHOR ADDRESS: College of Life Sciences, Zhejiang University, Hangzhou,
  310012, China**China
AUTHOR E-MAIL ADDRESS: lscshaoj@mail.hz.zj.cn
JOURNAL: Developmental and Comparative Immunology  27 (4): p313-321 April
2003 2003
MEDIUM: print
ISSN: 0145-305X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

CpG oligodeoxynucleotides activate grass carp (Ctenopharyngodon
  idellus) macrophages.
```

...ABSTRACT: and natural killer cells can be stimulated directly or
indirectly by the bacterial DNA and oligodeoxynucleotides (CDN)
containing the CpG motifs (CpG DNA). Using head kidney macrophages of
grass carp (Ctenopharyngodon...

...CDN-1826 (GACGTT) and -2006 (GTCGTT) for the mice and humans cells, the
CDN-1670 (AACGTT) used in Atlantic salmon, the CDN-D containing two
repeats motif of those in 1670...

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: CpG oligodeoxynucleotides--...

...oligodeoxynucleotides--

11/3,K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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16447089 BIOSIS NO.: 200200040600
Induction of interleukin-6 and interleukin-12 in bovine B lymphocytes,
monocytes, and macrophages by a CpG oligodeoxynucleotide (CDN 2059)
containing the GTCGTT motif
AUTHOR: Zhang Yan; Shoda Lisl K M; Brayton Kelly A; Estes D Mark; Palmer
Guy H; Brown Wendy C (Reprint)
AUTHOR ADDRESS: Department of Veterinary Microbiology and Pathology,
Washington State University, Pullman, WA, 99164-7040, USA**USA
JOURNAL: Journal of Interferon and Cytokine Research 21 (10): p871-881
October, 2001 2001
MEDIUM: print
ISSN: 1079-9907
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...interleukin-6 and interleukin-12 in bovine B lymphocytes, monocytes, and
macrophages by a CpG oligodeoxynucleotide (CDN 2059) containing the
GTCGTT motif

ABSTRACT: Bacterial DNA and synthetic oligodeoxynucleotides (CDN)
that contain unmethylated CpG dinucleotides flanked by certain bases (CpG
CDN) have been shown...

...B cell proliferation at a lower concentration (10 muM) when compared
with CpG CDN containing AACGTT or GACGTT motifs active for murine
leukocytes. Furthermore, CDN 2059 induced interleukin-6 (IL-6...

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: CpG oligodeoxynucleotide--

11/3,K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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16222243 BIOSIS NO.: 200100394082
Immunostimulatory CpG-modified plasmid DNA enhances IL-12, TNF-alpha, and
NO production by bovine macrophages
AUTHOR: Shoda Lisl K M; Kegerreis Kimberly A; Suarez Carlos E; Mwangi
Waithaka; Knowles Donald P; Brown Wendy C (Reprint)
AUTHOR ADDRESS: Department of Veterinary Microbiology and Pathology,
Washington State University, Pullman, WA, 99164-7040, USA**USA
JOURNAL: Journal of Leukocyte Biology 70 (1): p103-112 July, 2001 2001

MEDIUM: print
ISSN: 0741-5400
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: cells. In mice, modification of immunostimulatory sequences (ISSs), including CpG motifs, in pDNA vectors or oligodeoxynucleotides can increase or decrease their adjuvant properties. ISSs that stimulate optimal responses reportedly differ for murine and human leukocytes. We have previously characterized the mitogenic properties of oligodeoxynucleotides containing one AACGTT motif for bovine B lymphocytes. We now define cytokine responses by macrophages stimulated with pDNA engineered to contain an ISS comprising two AACGTT motifs. Macrophages activated with CpG-modified pDNA secreted significantly more interleukin-12, tumor necrosis factor...

...modified pDNA that contained nucleotides scrambled to remove CpG motifs. Engineered CpG-pDNA or CpG-oligodeoxynucleotides should be useful as vaccines or adjuvants to promote the enhanced type 1 responses important...

11/3,K/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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15665643 BIOSIS NO.: 200000383956
Synthetic oligodeoxynucleotides inhibit IgE induction in human lymphocytes
AUTHOR: Fujieda Shigeharu (Reprint); Iho Sumiko; Kimura Yuichi; Yamamoto Hideyuki; Igawa Hideki; Saito Hitoshi
AUTHOR ADDRESS: Department of Otorhinolaryngology, Fukui Medical University, Shimoaizuki, Matsuoka, Yoshida, Fukui, 910-1193, Japan**Japan
JOURNAL: American Journal of Respiratory and Critical Care Medicine 162 (1): p232-239 July, 2000 2000
MEDIUM: print
ISSN: 1073-449X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Synthetic oligodeoxynucleotides inhibit IgE induction in human lymphocytes

ABSTRACT: Synthetic oligodeoxynucleotides (ODNs) containing unmethylated CpG motifs have the capacity to stimulate T-helper (Th)1-type...
...the MPB-70 of Mycobacterium bovis Bacillus Calmette-Guerin. Two ODNs, containing CGT-ACG or AACGTT inhibited IgE production by human PBMC. When other oligonucleotides were substituted in a portion of the sequence of the core or flanking oligonucleotides in the ODN containing CGTACG, ODNs containing NACGTTCG or A/CTCGTTCG sequences specifically inhibited IgE...

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: ...synthetic oligodeoxynucleotide

11/3,K/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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15386572 BIOSIS NO.: 200000104885
Modulation of host immune responses by protozoal DNA
AUTHOR: Brown Wendy C (Reprint); Suarez Carlos E; Shoda Lisl KM; Estes D Mark
AUTHOR ADDRESS: Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA, 99164-7040, USA**USA
JOURNAL: Veterinary Immunology and Immunopathology 72 (1-2): p87-94 Dec. 15, 1999 1999
MEDIUM: print
ISSN: 0165-2427
DOCUMENT TYPE: Article; Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: murine B cells were identified in an 11 kb fragment of B. bovis DNA. An oligodeoxyribonucleotide containing one of these (AACGTT), located in the rhoptry associated protein-1 (rap-1) open reading frame, stimulated B cell...

11/3,K/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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15331378 BIOSIS NO.: 200000049691
Influence of backbone chemistry on immune activation by synthetic oligonucleotides
AUTHOR: Pisetsky David S (Reprint); Reich Charles F III
AUTHOR ADDRESS: VA Medical Center, 508 Fulton St., Durham, NC, USA**USA
JOURNAL: Biochemical Pharmacology 58 (12): p1981-1988 Dec. 15, 1999 1999
MEDIUM: print
ISSN: 0006-2952
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Influence of backbone chemistry on immune activation by synthetic oligonucleotides

...ABSTRACT: of backbone structure on these activities, we tested a series of synthetic phosphodiester and phosphorothioate oligonucleotides in in vitro cultures of murine spleen cells. These compounds were 30 bases long and consisted of either a single base or an immunostimulatory sequence (AACGTT) flanked on 5' and 3' ends by 12 nucleotides of each base. Cell activation was...
...and interleukin-12 was used as a measure of cytokine stimulation. In these assays, phosphorothioate oligonucleotides induced much higher levels of proliferation, CD69 expression, and cytokine production than the comparable phosphodiester...

...production was greatest with compounds with dA and dT flanks. Furthermore, while single base dG oligonucleotides stimulated proliferation as both phosphodiesters and phosphorothioates, they failed to stimulate cytokine production. Together, these findings indicate that base sequence as well as backbone chemistry influence immune activation by synthetic oligonucleotides, with the effects varying among responses. While suggesting differences in the structure-function relationships of...

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: ...synthetic oligonucleotides

11/3,K/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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15169085 BIOSIS NO.: 199900428745
The effect of CpG sequences on the B cell response to a viral glycoprotein encoded by a plasmid vector
AUTHOR: Pasquini S; Deng H; Reddy S T; Giles-Davis W; Ertl H C J (Reprint)
AUTHOR ADDRESS: Wistar Institute, 3601 Spruce Street, Philadelphia, PA, 19104, USA**USA
JOURNAL: Gene Therapy 6 (8): p1448-1455 Aug., 1999 1999
MEDIUM: print
ISSN: 0969-7128
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: the transgene product in mice. The antibody response could be rescued by concomitant injection of oligonucleotides carrying immunostimulatory sequences. The B cell response to two plasmid vectors, both expressing the same viral glycoprotein but containing a different content of the highly stimulatory AACGTT motif, was compared. Comparable B cell responses were induced to the two constructs given at ...

11/3,K/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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14989425 BIOSIS NO.: 199900249085
Mammalian granulocyte-macrophage colony-stimulating factor and some CpG motifs have an effect on the immunogenicity of DNA and subunit vaccines in fish
AUTHOR: Kanellos T S; Sylvester I D; Butler V L; Ambali A G; Partidos C D; Hamblin A S; Russell P H (Reprint)
AUTHOR ADDRESS: Department of Pathology and Infectious Diseases, Royal Veterinary College, Royal College Street, London, NW1 0TY, UK**UK
JOURNAL: Immunology 96 (4): p507-510 April, 1999 1999
MEDIUM: print
ISSN: 0019-2805
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A eukaryotic plasmid DNA carrying the AACGTT CpG motif in its ampR gene is a 'danger' signal for mice and caused an...

...no effect on antibody responses to beta-gal in either fish or mice. A synthetic oligonucleotide, which contains the GACGTT motif, potentiated antibody responses to co-administered beta-gal protein in...

11/3,K/10 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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14717222 BIOSIS NO.: 199800511469
DNA and a CpG oligonucleotide derived from Babesia bovis are mitogenic for bovine B cells
AUTHOR: Brown Wendy C (Reprint); Estes D Mark; Chantler Sue Ellen; Kegerreis Kimberly A; Suarez Carlos E

AUTHOR ADDRESS: Dep. Vet. Microbiol. Pathol., Washington State Univ., Pullman, WA 99164-7040, USA**USA
JOURNAL: Infection and Immunity 66 (11): p5423-5432 Nov., 1998 1998
MEDIUM: print
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

DNA and a CpG oligonucleotide derived from Babesia bovis are mitogenic for bovine B cells

...ABSTRACT: and several CpG hexameric sequences with known activity for murine B cells were identified. An oligodeoxynucleotide containing one of these ISS (AACGTT), which is present within the rhoptry-associated protein-1 (rap-1) open reading frame, was...

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: CpG oligonucleotide;

11/3,K/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2009 The Thomson Corporation. All rts. reserv.

14060235 BIOSIS NO.: 199799694295
Immune stimulation-a class effect of phosphorothioate oligodeoxynucleotides in rodents
AUTHOR: Monteith David K (Reprint); Henry Scott P; Howard Randy B; Flournoy Shin; Levin Arthur A; Bennett C Frank; Crooke Stanley T
AUTHOR ADDRESS: Isis Pharmaceuticals, 2292 Faraday Ave., Carlsbad, CA 92008, USA**USA
JOURNAL: Anti-Cancer Drug Design 12 (5): p421-432 1997 1997
ISSN: 0266-9536
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Immune stimulation-a class effect of phosphorothioate oligodeoxynucleotides in rodents

ABSTRACT: Treatment of rodents with phosphorothioate oligodeoxynucleotides induces a form of immune stimulation characterized by splenomegaly, lymphoid hyperplasia, hypergammaglobulinemia and mixed mononuclear...
...a review of historical data and specific in vivo and in vitro studies. All phosphorothioate oligodeoxynucleotides evaluated induced splenomegaly and B-lymphocyte proliferation. Splenomegaly and B-lymphocyte proliferation increased with dose or concentration of oligodeoxynucleotide. Splenomegaly appeared to occur, at least in part, as a result of stimulation of B...

...proliferation. There were differences with respect to degree or potency of immune stimulation by different oligodeoxynucleotides. The rank order potencies for B-lymphocyte proliferation in vitro and splenomegaly correlated well for the oligodeoxynucleotides tested. Particular oligodeoxynucleotide sequence motifs or palindromes have been demonstrated to affect in vitro cell proliferation. Inclusion of a 5'-AACGTT-3' palindrome in a phosphorothioate oligodeoxynucleotide sequence significantly enhanced the potency. While inclusion of this palindrome or a CpG motif alone...

...palindromes and motifs were clearly not the sole factor required for

immune stimulation. Several phosphorothioate oligodeoxynucleotides that did not contain a CpG motif still induced immune stimulation in mice. The immune stimulation induced by phosphorothioate oligodeoxynucleotides was an effect on this class of compounds to which rodents are acutely sensitive.

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS:
MISCELLANEOUS TERMS: ...PHOSPHOROTHIOATE OLIGODEOXYNUCLEOTIDES;
CONCEPT CODES:
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Set	Items	Description
S1	53	E1-E12
S2	0	S1 AND AACGTT
S3	491	E1-E12
S4	0	S3 AND (AACGTT)
S5	0	S3 AND CG
S6	227	S3 AND CPG
S7	127	RD (unique items)
S8	43	E1-E12
S9	0	S8 AND AACGTT
S10	174	AACGTT AND OLIG?
S11	38	RD (unique items)